## **AMENDMENTS TO THE CLAIMS**

1. (Previously Presented) A compound having the generalized structural formula

$$X - (CR^{4}_{2}) - J$$

$$Z' - R^{1}$$

$$R^{2}$$

$$G^{3})_{q}$$

$$R^{2}$$

I.

wherein

 $\mathbf{R}^1$  and  $\mathbf{R}^2$ 

together form a bridge containing two  $T^2$  moieties and one  $T^3$  moiety, said bridge, taken together with the ring to which it is attached, forming a bicyclic of structure

wherein

each  $T^2$  independently represents CH, or  $CG^1$ ; and  $T^3$  represents  $CR^4G^1$  or  $C(R^4)_2$ ;

and wherein

G1 is a substituent independently selected from the group consisting of

- $-N(R^6)_2$ ;
- $-NR^3COR^6$ ;
- halogen;
- alkyl;
- cycloalkyl;
- lower alkenyl;
- lower cycloalkenyl;

- halogen-substituted alkyl;
- amino-substituted alkyl;
- N-lower alkylamino-substituted alkyl;
- N,N-di-lower alkylamino-substituted alkyl;
- N-lower alkanoylamino-substituted alkyl;
- hydroxy-substituted alkyl;
- cyano-substituted alkyl;
- carboxy-substituted alkyl;
- lower alkoxycarbonyl-substituted alkyl;
- phenyl lower alkoxycarbonyl-substituted alkyl;
- halogen-substituted alkylamino;
- amino-substituted alkylamino;
- N-lower alkylamino-substituted alkylamino;
- N,N-di-lower alkylamino-substituted alkylamino;
- N-lower alkanoylamino-substituted alkylamino;
- hydroxy-substituted alkylamino;
- cyano-substituted alkylamino;
- carboxy-substituted alkylamino;
- lower alkoxycarbonyl-substituted alkylamino;
- phenyl-lower alkoxycarbonyl-substituted alkylamino;
- $-OR^6$ ;
- $-SR^6$ ;
- $-S(O)R^6$ ;
- $-S(O)_2R^6$ ;
- halogenated lower alkoxy;
- halogenated lower alkylthio;
- halogenated lower alkylsulfonyl;
- $-OCOR^6$ ;
- $-COR^6$ ;

- $-CO_2R^6$ ;
- $-CON(R^6)_2$ ;
- $-CH_2OR^3$ ;
- -NO<sub>2</sub>;
- -CN;
- amidino;
- guanidino;
- sulfo;
- -B(OH)2;
- optionally substituted aryl;
- optionally substituted heteroaryl;
- optionally substituted saturated heterocyclyl;
- optionally substituted saturated heterocyclylalkyl;
- optionally substituted partially unsaturated heterocyclyl;
- optionally substituted partially unsaturated heterocyclylalkyl;
- $-OCO_2R^3$ ;
- optionally substituted heteroarylalkyl;
- optionally substituted heteroaryloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroaryl);
- optionally substituted heteroarylalkyloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroarylalkyl);
- -CHO;
- $-OCON(R^6)_2$ ;
- $-NR^3CO_2R^6$ ;
- $-NR^3CON(R^6)_2$

R<sup>3</sup> is H or lower alkyl;

R<sup>6</sup> is independently selected from the group consisting of

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• H;
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- alkyl;
- cycloalkyl;
- optionally substituted aryl; and
- optionally substituted aryl lower alkyl;
- lower alkyl- $N(R^3)_2$ ; and
- lower alkyl-OH;

R<sup>4</sup> is H, halogen, or lower alkyl;

p is 0, 1, or 2;

X is selected from the group consisting of O, S, and NR<sup>3</sup>;

Y is selected from the group consisting of

- lower alkylene;
- -CH<sub>2</sub>-O-;
- -CH<sub>2</sub>-S-;
- -CH<sub>2</sub>-NH-;
- -O-;
- -S-;
- -NH-;
- $-(CR_2^4)_n$ -S(O)<sub>p</sub>-(5-membered heteroaryl)-(CR<sub>2</sub><sup>4</sup>)<sub>s</sub>-;
- $-(CR_2^4)_n-C(G^2)(R^4)-(CR_2^4)_s-$ ;

wherein

n and s are each independently 0 or an integer of 1-2; and  $G^2 \text{ is selected from the group consisting of -CN, -CO}_2R^3, \text{-CON}(R^6)_2, \text{ and -} \\ CH_2N(R^6)_2;$ 

- -O-CH<sub>2</sub>-;
- -S(O)-;
- $-S(O)_{2}$ -;

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-SCH<sub>2</sub>-;
-S(O)CH<sub>2</sub>-;
-S(O)<sub>2</sub>CH<sub>2</sub>-;
-CH<sub>2</sub>S(O)-; and
-CH<sub>2</sub>S(O)<sub>2</sub>Z is N;
q is 0, 1, or 2;

G<sup>3</sup> is a monovalent or bivalent moiety selected from the group consisting of:

- lower alkyl;
- $-NR^3COR^6$ ;
- carboxy-substituted alkyl;
- lower alkoxycarbonyl-substituted alkyl;
- $-OR^6$ ;
- $-SR^6$ ;
- $-S(O)R^6$ ;
- $-S(O)_2R^6$ ;
- $-OCOR^6$ ;
- $-COR^6$ ;
- $-CO_2R^6$ ;
- $-CH_2OR^3$ ;
- $-CON(R^6)_2$ ;
- $-S(O)_2N(R^6)_2$ ;
- -NO<sub>2</sub>;
- -CN;
- optionally substituted aryl;
- optionally substituted heteroaryl;
- optionally substituted saturated heterocyclyl;

- optionally substituted partially unsaturated heterocyclyl;
- optionally substituted heteroarylalkyl;
- optionally substituted heteroaryloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroaryl);
- optionally substituted heteroarylalkyloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroarylalkyl);
- $-OCON(R^6)_2$ ;
- $-NR^3CO_2R^6$ ;
- $-NR^3CON(R^6)_2$ ; and
  - bivalent bridge of structure T<sup>2</sup>=T<sup>2</sup>-T<sup>3</sup> wherein

each T<sup>2</sup> independently represents N, CH, or CG<sup>3</sup>; and T<sup>3</sup> represents S, O, CR<sup>4</sup>G<sup>3</sup>, C(R<sup>4</sup>)<sub>2</sub>, or NR<sup>3</sup>; wherein G<sup>3</sup> represents any of the above-defined moieties G<sup>3</sup> which are monovalent; and

the terminal  $T^2$  is bound to L, and  $T^3$  is bound to D, forming a 5-membered fused ring;

A and D independently represent N or CH;

B and E independently represent N or CH;

L represents N or CH; and

with the provisos that

- a) the total number of N atoms in the ring containing A, B, D, E, and L is 0, 1, 2, or 3; and
- b) when L represents CH and q=0\_or any G³ is a monovalent substituent, at least one of A and D is an N atom; and
- c) when L represents CH and a G<sup>3</sup> is a bivalent bridge of structure T<sup>2</sup>=T<sup>2</sup>-T<sup>3</sup>, then A, B, D, and E are also CH;

J is a ring selected from the group consisting of

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- aryl;
- pyridyl; and
- cycloalkyl;

q' represents the number of substituents G<sup>4</sup> on ring J and is 0, 1, 2, 3, 4, or 5, and

G<sup>4</sup> is a monovalent or bivalent moiety selected from the group consisting of

- $-N(R^6)_2$ ;
- $-NR^3COR^6$ ;
- halogen;
- alkyl;
- cycloalkyl;
- lower alkenyl;
- lower cycloalkenyl;
- halogen-substituted alkyl;
- amino-substituted alkyl;
- N-lower alkylamino-substituted alkyl;
- N,N-di-lower alkylamino-substituted alkyl;
- N-lower alkanoylamino-substituted alkyl;
- hydroxy-substituted alkyl;
- cyano-substituted alkyl;
- carboxy-substituted alkyl;
- lower alkoxycarbonyl-substituted alkyl;
- phenyl lower alkoxycarbonyl-substituted alkyl;
- halogen-substituted alkylamino;
- amino-substituted alkylamino;
- N-lower alkylamino-substituted alkylamino;
- N,N-di-lower alkylamino-substituted alkylamino;
- N-lower alkanoylamino-substituted alkylamino;

- hydroxy-substituted alkylamino;
- cyano-substituted alkylamino;
- carboxy-substituted alkylamino;
- lower alkoxycarbonyl-substituted alkylamino;
- phenyl-lower alkoxycarbonyl-substituted alkylamino;
- $-OR^6$ ;
- $-SR^6$ ;
- $-S(O)R^6$ ;
- $-S(O)_2R^6$ ;
- halogenated lower alkoxy;
- halogenated lower alkylthio;
- halogenated lower alkylsulfonyl;
- $-OCOR^6$ ;
- $-COR^6$ ;
- $-CO_2R^6$ ;
- $-CON(R^6)_2$ ;
- $-CH_2OR^3$ ;
- -NO<sub>2</sub>;
- -CN;
- amidino;
- guanidino;
- sulfo;
- -B(OH)2;
- optionally substituted aryl;
- optionally substituted heteroaryl;
- optionally substituted saturated heterocyclyl;
- optionally substituted partially unsaturated heterocyclyl;
- $-OCO_2R^3$ ;
- optionally substituted heteroarylalkyl;

- optionally substituted heteroaryloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroaryl);
- optionally substituted heteroarylalkyloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroarylalkyl);
- -CHO;
- $-OCON(R^6)_2$ ;
- $-NR^3CO_2R^6$ ;
- $-NR^3CON(R^6)_2$ ; and
  - fused ring-forming bivalent bridges attached to and connecting adjacent positions of ring J, said bridges having the structures:

a)

$$T_{\parallel}^{2}$$
 $T_{\parallel}^{2}$ 

wherein

each T<sup>2</sup> independently represents N, CH, or CG<sup>4</sup>;

T<sup>3</sup> represents S, O, CR<sup>4</sup>G<sup>4</sup>, C(R<sup>4</sup>)<sub>2</sub>, or NR<sup>3</sup>; wherein

G4' represents any of the above-defined moieties G<sup>4</sup> which are monovalent; and

binding to ring J is achieved via terminal atoms  $T^2$  and  $T^3$ ;

b)

$$T^{2} \downarrow T^{2}$$

$$T^{2} \downarrow T^{2}$$

wherein

each T<sup>2</sup> independently represents N, CH, or CG<sup>4</sup>; wherein

G4' represents any of the above-defined moieties G<sup>4</sup> which are monovalent; and

with the proviso that a maximum of two bridge atoms  $T^2$  may be N; and binding to ring J is achieved via terminal atoms  $T^2$ ; and

c)

$$T^{4}$$
,  $T^{5}$ ,  $T^{6}$ ,  $T^{6}$ ,  $T^{5}$ ,  $T^{6}$ , or  $T^{5}$ ,  $T^{6}$ ,  $T^{5}$ ,

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wherein

each T<sup>4</sup>, T<sup>5</sup>, and T<sup>6</sup> independently represents O, S, CR<sup>4</sup>G<sup>4'</sup>, C(R<sup>4</sup>)<sub>2</sub>, or NR<sup>3</sup>; wherein

G4' represents any of the above-defined moieties G<sup>4</sup> which are monovalent; and

binding to ring J is achieved via terminal atoms  $T^4$  or  $T^5$ ; with the provisos that:

- i) when one  $T^4$  is O, S, or  $NR^3$ , the other  $T^4$  is  $CR^4G^{4'}$  or  $C(R^4)_2$ ;
  - ii) a bridge comprising T<sup>5</sup> and T<sup>6</sup> atoms may contain a maximum of two heteroatoms O, S, or N; and
  - iii) in a bridge comprising T<sup>5</sup> and T<sup>6</sup> atoms, when one T<sup>5</sup> group and one T<sup>6</sup> group are O atoms, or two T<sup>6</sup> groups are O atoms, said O atoms are separated by at least one carbon atom;

when  $G^4$  is an alkyl group located on ring J adjacent to the linkage  $-(CR^4_2)_{p^-}$ , and X is  $NR^3$  wherein  $R^3$  is an alkyl substituent, then  $G^4$  and the alkyl substituent  $R^3$  on X may be joined to form a bridge of structure  $-(CH_2)_{p'}$ - wherein p' is 2, 3, or 4, with the proviso that the sum of p and p' is 2, 3, or 4, resulting in formation of a nitrogen-containing ring of 5, 6, or 7 members;

and with the further provisos that:

- in G¹, G², G³, and G⁴, when two groups R³ or R⁶ are each alkyl and located on the same N atom they may be linked by a bond, an O, an S, or NR³ to form a N-containing heterocycle of 5 − 7 ring atoms;
- when an aryl, heteroaryl, or heterocyclyl ring is optionally substituted, that ring may bear up to 5 substituents which are independently selected from the group consisting of amino, mono-loweralkyl-substituted amino, di-loweralkyl-substituted amino, lower

alkanoylamino, halogeno, lower alkyl, halogenated lower alkyl, hydroxy, lower alkoxy, lower alkylthio, halogenated lower alkoxy, halogenated lower alkylthio, lower alkanoyloxy,  $-CO_2R^3$ , -CHO,  $-CH_2OR^3$ ,  $-OCO_2R^3$ ,  $-CON(R^6)_2$ ,  $-OCON(R^6)_2$ ,  $-OCON(R^6)_2$ , nitro, amidino, guanidino, mercapto, sulfo, and cyano; and

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- when any alkyl group is attached to O, S, or N, and bears a hydroxyl substituent, then said hydroxyl substituent is separated by at least two carbon atoms from the O, S, or N to which the alkyl group is attached,

or a pharmaceutically acceptable salt or prodrug thereof.

2. (Previously Presented) A compound of claim 1 wherein

 $R^1$  and  $R^2$ 

together form a bridge containing two  $T^2$  moieties and one  $T^3$  moiety, said bridge, taken together with the ring to which it is attached, forming a bicyclic of structure

$$Z'$$
 $T^2$ 
 $T^3$ 
 $T^2$ 
 $T^3$ 
 $T^2$ 
 $T^3$ 

wherein

each  $T^2$  independently represents CH, or  $CG^1$ ; and  $T^3$  represents  $CH_2$ .

- 3. (Original) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.
- 4. (Canceled)
- 5. (Canceled)
- 6. (Previously Presented) A compound having the generalized structural formula

II.

wherein

 $R^1$  and  $R^2$ :

- i) independently represent H or lower alkyl;
  - ii) together form a bridge of structure

$$G^1$$
) m

wherein binding is achieved via the terminal carbon atoms;

iii) together form a bridge of structure

$$=$$
  $G^1)_m$ 

wherein binding is achieved via the terminal carbon atoms;

or

v) together form a bridge containing two T<sup>2</sup> moieties and one T<sup>3</sup> moiety, said bridge, taken together with the ring to which it is attached, forming a bicyclic of structure

$$Z$$
 $T^2$ 
 $T^3$ 
 $T^2$ 
 $T^3$ 
 $T^2$ 
 $T^3$ 
 $T^2$ 
 $T^3$ 
 $T^2$ 
 $T^3$ 
 $T^2$ 
 $T^3$ 
 $T^2$ 

wherein

each  $T^2$  independently represents CH, or  $CG^1$ ; and  $T^3$  represents  $CR^4G^1$ , <u>or</u>  $C(R^4)_2$ ;

and wherein

m is 0 or an integer 1-4; and

G<sup>1</sup> is a substituent independently selected from the group consisting of

- $-N(R^6)_2$ ;
- $-NR^3COR^6$ ;
- halogen;
- alkyl;
- cycloalkyl;
- lower alkenyl;
- lower cycloalkenyl;
- halogen-substituted alkyl;
- amino-substituted alkyl;
- N-lower alkylamino-substituted alkyl;
- N,N-di-lower alkylamino-substituted alkyl;
- N-lower alkanoylamino-substituted alkyl;
- hydroxy-substituted alkyl;
- cyano-substituted alkyl;
- carboxy-substituted alkyl;
- lower alkoxycarbonyl-substituted alkyl;
- phenyl lower alkoxycarbonyl-substituted alkyl;
- halogen-substituted alkylamino;
- amino-substituted alkylamino;
- N-lower alkylamino-substituted alkylamino;
- N,N-di-lower alkylamino-substituted alkylamino;
- N-lower alkanoylamino-substituted alkylamino;
- hydroxy-substituted alkylamino;
- cyano-substituted alkylamino;
- carboxy-substituted alkylamino;
- lower alkoxycarbonyl-substituted alkylamino;
- phenyl-lower alkoxycarbonyl-substituted alkylamino;
- $-OR^6$ ;

- $-SR^6$ ;
- $-S(O)R^6$ ;
- $-S(O)_2R^6$ ;
- halogenated lower alkoxy;
- halogenated lower alkylthio;
- halogenated lower alkylsulfonyl;
- $-OCOR^6$ ;
- $-COR^6$ ;
- $-CO_2R^6$ ;
- $-CON(R^6)_2$ ;
- $-CH_2OR^3$ ;
- -NO<sub>2</sub>;
- -CN;
- amidino;
- guanidino;
- sulfo;
- -B(OH)2;
- optionally substituted aryl;
- optionally substituted heteroaryl;
- optionally substituted saturated heterocyclyl;
- optionally substituted saturated heterocyclylalkyl;
- optionally substituted partially unsaturated heterocyclyl;
- optionally substituted partially unsaturated heterocyclylalkyl;
- $-OCO_2R^3$ ;
- optionally substituted heteroarylalkyl;
- optionally substituted heteroaryloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroaryl);
- optionally substituted heteroarylalkyloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroarylalkyl);

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• -CHO;
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- $-OCON(R^6)_2$ ;
- $-NR^3CO_2R^6$ ;
- $-NR^3CON(R^6)_2$

R<sup>3</sup> is H or lower alkyl;

R<sup>6</sup> is independently selected from the group consisting of

- H;
- alkyl;
- cycloalkyl;
- optionally substituted aryl; and
- optionally substituted aryl lower alkyl;
- lower alkyl- $N(R^3)_2$ ; and
- lower alkyl-OH;

R<sup>4</sup> is H, halogen, or lower alkyl;

p is 0, 1, or 2;

X is selected from the group consisting of O, S, and  $NR^3$ ;

Y is selected from the group consisting of

- lower alkylene;
- -CH<sub>2</sub>-O-;
- -CH<sub>2</sub>-S-;
- -CH<sub>2</sub>-NH-;
- -O-;
- -S-;
- -NH-;

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-(CR_2^4)_n-S(O)_p-(5-membered heteroaryl)-(CR_2^4)_s-;
  -(CR_{2}^{4})_{n}-C(G^{2})(R^{4})-(CR_{2}^{4})_{s};
    wherein
        n and s are each independently 0 or an integer of 1-2; and
                 G<sup>2</sup> is selected from the group consisting of -CN, -CO<sub>2</sub>R<sup>3</sup>, -CON(R<sup>6</sup>)<sub>2</sub>, and -
                     CH_2N(R^6)_2;
  -O-CH<sub>2</sub>-;
  -S(O)-;
  -S(O)_2-;
 -SCH<sub>2</sub>-;
  -S(O)CH_2-;
   -S(O)_2CH_2-;
  -CH_2S(O)-; and
  -CH_2S(O)_2
    Z is N;
    q is 1 or 2;
    G<sup>3</sup> is a monovalent or bivalent moiety selected from the group consisting of
 lower alkyl;
• -NR^3COR^6;
  carboxy-substituted alkyl;
   lower alkoxycarbonyl-substituted alkyl;
   -OR^6;
  -SR<sup>6</sup>;
  -S(O)R^6;
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 $-S(O)_2R^6$ ;  $-OCOR^6$ ;

 $-COR^6$ ;

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-CO_2R^6;
-CH_2OR^3;
-CON(R^6)_2;
 -S(O)_2N(R^6)_2;
 -NO_2;
 -CN;
 optionally substituted aryl;
 optionally substituted heteroaryl;
 optionally substituted saturated heterocyclyl;
 optionally substituted partially unsaturated heterocyclyl;
 optionally substituted heteroarylalkyl;
 optionally substituted heteroaryloxy;
 -S(O)<sub>p</sub>(optionally substituted heteroaryl);
 optionally substituted heteroarylalkyloxy;
 -S(O)<sub>p</sub>(optionally substituted heteroarylalkyl);
-OCON(R^6)_2;
-NR^3CO_2R^6;
-NR^3CON(R^6)_2; and
      • bivalent bridge of structure T<sup>2</sup>=T<sup>2</sup>-T<sup>3</sup>:
                   wherein
                   each T<sup>2</sup> independently represents N, CH, or CG<sup>3'</sup>; and
                   T<sup>3</sup> represents S, O, CR<sup>4</sup>G<sup>3'</sup>, C(R<sup>4</sup>)<sub>2</sub>, or NR<sup>3</sup>; wherein
                   G<sup>3'</sup> represents any of the above-defined moieties G3 which are monovalent;
                   the terminal T<sup>2</sup> is bound to L, and T<sup>3</sup> is bound to D, forming a 5-membered
                   fused ring;
 A and D are CH;
 B and E are CH;
 L is CH;
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with the proviso that the resulting phenyl ring bears as a  $G^3$  substituent said bivalent bridge of structure  $T^2=T^2-T^3$ ;

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J is a ring selected from the group consisting of

- aryl;
- pyridyl; and
- cycloalkyl;

q' represents the number of substituents  $G^4$  on ring J and is 0, 1, 2, 3, 4, or 5, and  $G^4$  is a monovalent or bivalent moiety selected from the group consisting of

- $-N(R^6)_2$ ;
- $-NR^3COR^6$ ;
- halogen;
- alkyl;
- cycloalkyl;
- lower alkenyl;
- lower cycloalkenyl;
- halogen-substituted alkyl;
- amino-substituted alkyl;
- N-lower alkylamino-substituted alkyl;
- N,N-di-lower alkylamino-substituted alkyl;
- N-lower alkanoylamino-substituted alkyl;
- hydroxy-substituted alkyl;
- cyano-substituted alkyl;
- carboxy-substituted alkyl;
- lower alkoxycarbonyl-substituted alkyl;
- phenyl lower alkoxycarbonyl-substituted alkyl;
- halogen-substituted alkylamino;
- amino-substituted alkylamino;
- N-lower alkylamino-substituted alkylamino;

- N,N-di-lower alkylamino-substituted alkylamino;
- N-lower alkanoylamino-substituted alkylamino;
- hydroxy-substituted alkylamino;
- cyano-substituted alkylamino;
- carboxy-substituted alkylamino;
- lower alkoxycarbonyl-substituted alkylamino;
- phenyl-lower alkoxycarbonyl-substituted alkylamino;
- $-OR^6$ ;
- $-SR^6$ ;
- $-S(O)R^6$ ;
- $-S(O)_2R^6$ ;
- halogenated lower alkoxy;
- halogenated lower alkylthio;
- halogenated lower alkylsulfonyl;
- $-OCOR^6$ ;
- $-COR^6$ ;
- $-CO_2R^6$ ;
- $-CON(R^6)_2$ ;
- $-CH_2OR^3$ ;
- $-NO_2$ ;
- -CN;
- amidino;
- guanidino;
- sulfo;
- -B(OH)2;
- optionally substituted aryl;
- optionally substituted heteroaryl;
- optionally substituted saturated heterocyclyl;
- optionally substituted partially unsaturated heterocyclyl;

- $-OCO_2R^3$ ;
- optionally substituted heteroarylalkyl;
- optionally substituted heteroaryloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroaryl);
- optionally substituted heteroarylalkyloxy;
- -S(O)<sub>p</sub>(optionally substituted heteroarylalkyl);
- -CHO;
- $-OCON(R^6)_2$ ;
- $-NR^3CO_2R^6$ ;
- $-NR^3CON(R^6)_2$ ; and
  - fused ring-forming bivalent bridges attached to and connecting adjacent positions of ring J, said bridges having the structures:

a)

$$T^2$$
 $T^2$ 
 $T^2$ 

wherein

each T<sup>2</sup> independently represents N, CH, or CG<sup>4</sup>;

T<sup>3</sup> represents S, O, CR<sup>4</sup>G<sup>4</sup>, C(R<sup>4</sup>)<sub>2</sub>, or NR<sup>3</sup>; wherein

 $G^{4'}$  represents any of the above-defined moieties  $G^{4}$  which are monovalent; and

binding to ring J is achieved via terminal atoms T<sup>2</sup> and T<sup>3</sup>;

b)

$$T^{2}$$

$$T^{2}$$

$$T^{2}$$

wherein

each  $T^2$  independently represents N, CH, or  $CG^{4'}$ ; wherein

 $\mathrm{G4'}$  represents any of the above-defined moieties  $\mathrm{G^4}$  which are

monovalent; and

with the proviso that a maximum of two bridge atoms T<sup>2</sup> may be N; and

binding to ring J is achieved via terminal atoms T<sup>2</sup>; and

c)

$$T^{4}$$
,  $T^{5}$ ,  $T^{6}$ ,  $T^{5}$ ,  $T^{6}$ ,  $T^{5}$ ,  $T^{6}$ , or  $T^{5}$ ,  $T^{6}$ ,  ,

wherein

each T<sup>4</sup>, T<sup>5</sup>, and T<sup>6</sup> independently represents O, S, CR<sup>4</sup>G<sup>4'</sup>, C(R<sup>4</sup>)<sub>2</sub>, or NR<sup>3</sup>; wherein

G4' represents any of the above-identified moieties G4 which are monovalent; and

binding to ring J is achieved via terminal atoms  $\boldsymbol{T}^4$  or  $\boldsymbol{T}^5$  ; with the provisos that:

- i) when one  $T^4$  is O, S, or  $NR^3$ , the other  $T^4$  is  $CR^4G^{4'}$  or  $C(R^4)_2$ ;
  - ii) a bridge comprising T<sup>5</sup> and T<sup>6</sup> atoms may contain a maximum of two heteroatoms O, S, or N; and
  - iii) in a bridge comprising T<sup>5</sup> and T<sup>6</sup> atoms, when one T<sup>5</sup> group and one T<sup>6</sup> group are O atoms, or two T<sup>6</sup> groups are O atoms, said O atoms are separated by at least one carbon atom;

when  $G^4$  is an alkyl group located on ring J adjacent to the linkage  $-(CR^4_2)_{p^-}$ , and X is  $NR^3$  wherein  $R^3$  is an alkyl substituent, then  $G^4$  and the alkyl substituent  $R^3$  on X may be joined to form a bridge of structure  $-(CH_2)_{p'}$ - wherein p' is 2, 3, or 4, with the proviso that the sum of p and p' is 2, 3, or 4, resulting in formation of a nitrogen-containing ring of 5, 6, or 7 members;

and with the further provisos that:

- in G<sup>1</sup>, G<sup>2</sup>, G<sup>3</sup>, and G<sup>4</sup>, when two groups R<sup>3</sup> or R<sup>6</sup> are each alkyl and located on the same N atom they may be linked by a bond, an O, an S, or NR<sup>3</sup> to form a N-containing heterocycle of 5 7 ring atoms;
- when an aryl, heteroaryl, or heterocyclyl ring is optionally substituted, that ring may bear up to 5 substituents which are independently selected from the group consisting of

amino, mono-loweralkyl-substituted amino, di-loweralkyl-substituted amino, lower alkanoylamino, halogeno, lower alkyl, halogenated lower alkyl, hydroxy, lower alkoxy, lower alkylthio, halogenated lower alkoxy, halogenated lower alkylthio, lower alkanoyloxy, -CO<sub>2</sub>R<sup>3</sup>, -CHO, -CH<sub>2</sub>OR<sup>3</sup>, -OCO<sub>2</sub>R<sup>3</sup>, -CON(R<sup>6</sup>)<sub>2</sub>, -OCON(R<sup>6</sup>)<sub>2</sub>, -NR<sup>3</sup>CON(R<sup>6</sup>)<sub>2</sub>, nitro, amidino, guanidino, mercapto, sulfo, and cyano; and

- when any alkyl group is attached to O, S, or N, and bears a hydroxyl substituent, then said hydroxyl substituent is separated by at least two carbon atoms from the O, S, or N to which the alkyl group is attached,

or a pharmaceutically acceptable salt or prodrug thereof.

- 7. (Original) A compound of claim 6 wherein, in the ring comprising A, B, D, E, and L and a bivalent bridge of structure T<sup>2</sup>=T<sup>2</sup>-T<sup>3</sup>, the terminal T<sup>2</sup> represents N and the T<sup>3</sup> unit of said bridge represents S, O, CR<sup>4</sup><sub>2</sub>, or NR<sup>3</sup>.
- 8. (Original) A pharmaceutical composition comprising a compound of claim 6 and a pharmaceutically acceptable carrier.
- 9. (Canceled)
- 10. (Canceled)
- 11. (Canceled)
- 12. (Canceled)
- 13. (Canceled)
- 14. (Canceled)

## 15. (Canceled)

## 16. (Currently Amended) A compound selected from the group consisting of

Ex. No.:	Compound Name (IUPAC):
1	N-(4-chlorophenyl)-4-(4-pyridinylsulfanyl)-1-isoquinolinamine
2	N-(2,3-dihydro-1H-inden-5-yl)-4-(4-pyridinylsulfanyl)-1-
<del>-</del>	isoquinolinamine
3	N-(1,3-benzothiazol-6-yl)-4-(4-pyridinylsulfanyl)-1-isoquinolinamine
4	N-(4-chlorophenyl) 4 (4-pyridinylmethyl) 1-isoquinolinamine
5	N-(1,3-benzothiazol-6-yl) 4-(4-pyridinylmethyl) 1-isoquinolinamine
6	N-(2,3-dihydro-1H-inden-5-yl)-4-(4-pyridinylmethyl)-1
Ü	isoquinolinamine
7	N-(3-fluoro-4-methylphenyl)-4-(4-pyridinylmethyl)-1-isoquinolinamine
8	N (4 chlorophenyl) 7 (4 pyridinylmethoxy)thieno[2,3 d]pyridazin 4
Ü	amine
9	N-(4-chlorophenyl)-7-(4-pyridinylmethoxy)furo[2,3-d]pyridazin-4-
	amine
10	4-[({4-[(4-chlorophenyl)amino]thieno[2,3-d]pyridazin-7-
	yl]oxy)methyl]-2-pyridinecarboxamide
11	4-[({4-[(4-chlorophenyl)amino]thieno[2,3-d]pyridazin-7-
	yl\oxy)methyl\ N methyl 2 pyridinecarboxamide
12	4 ({1 [(4 chlorophenyl)amino] 4 isoquinolinyl}methyl) 2
	pyridinecarboxamide
<del>13</del>	4-([1-[(4-chlorophenyl)amino]-4-isoquinolinyl]methyl)-N-methyl-2-
	pyridinecarboxamide
<del>14</del>	4-[({4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl}oxy)methyl]
	N methyl 2 pyridinecarboxamide
<del>16</del>	4 [({4 [(4 chlorophenyl)amino]furo[2,3 d]pyridazin 7 yl}oxy)methyl]
	2-pyridinecarboxamide
<del>17</del>	N-(1,3-benzothiazol-6-yl)-N-[4-[(4-chlorophenyl)amino]thieno[2,3-
	d]pyridazin-7-yl]amine
<del>18</del>	N-(1,3-benzothiazol-6-yl)-N-[4-(2,3-dihydro-1H-inden-5-
	ylamino)thieno[2,3-d]pyridazin-7-yl]amine
<del>19</del>	4-(5-bromo-2,3-dihydro-1 <i>H</i> -indol-1-yl)-7-(4-
	pyridinylmethoxy)furo[2,3-d]pyridazine
<del>20</del>	4-[({4-[(4-methoxyphenyl)amino]furo[2,3-d]pyridazin-7-
	yl}oxy)methyl] N-methyl-2-pyridinecarboxamide
<del>21</del>	N-(4-methoxyphenyl)-7-(4-pyridinylmethoxy)furo[2,3-d]pyridazin-4-
_	amine
<del>22</del>	4-[({4-[(4-methoxyphenyl)amino]furo[2,3-d]pyridazin-7-
	yl]oxy)methyl]-2-pyridinecarboxamide
<del>23</del>	N <sup>4</sup> -(1,3-benzothiazol-6-yl) N <sup>4</sup> -(4-chlorophenyl)thieno[2,3-d]pyridazine-
	4,7-diamine

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N-(1,3-benzothiazol-6-yl) N-[4-(2,3-dihydro-1H-inden-5-
ylamino)thieno[2,3-d]pyridazin-7-yl]amine N (1H indexel 5 yl) N [4 (1H indexel 5 ylamine)thiene[2,2]
N-(1H-indazol-5-yl)-N-[4-(1H-indazol-5-ylamino)thieno[2,3-
d]pyridazin-7-yl]amine
N (1,3 benzothiazol 6 yl) N [4 (1,3 benzothiazol 6 ylamino)furo[2,3 dlpwidazin 7 yllamina
d]pyridazin-7-yl]amine  4-[({4-[(4-methoxyphenyl)amino]furo[2,3-d]pyridazin-7-
yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide
4-[({4-[(3-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide
4-[({4-[(3-chloro-4-fluorophenyl)amino]furo[2,3-d]pyridazin-7-
yl}oxy)methyl]-N-methyl-2-pyridinecarboxamide
4-[({4-[(4-fluorophenyl)amino]furo[2,3-d]pyridazin-7-yl}oxy)methyl]-
N-methyl-2-pyridinecarboxamide
4-[({4-[(4-bromophenyl)amino]furo[2,3-d]pyridazin-7-yl]oxy)methyl]-
N-methyl-2-pyridinecarboxamide
N-methyl-4-[({4-[(4-methylphenyl)amino]furo[2,3-d]pyridazin-7-
yl]oxy)methyl]-2-pyridinecarboxamide
N-methyl-4-[({4-[(3-methylphenyl)amino]furo[2,3-d]pyridazin-7-
yl}oxy)methyl]-2-pyridinecarboxamide
N-methyl-4-{[(4-{[4-(trifluoromethyl)phenyl]amino}furo[2,3-
d]pyridazin-7-yl)oxy]methyl}-2-pyridinecarboxamide
N-methyl-4-[[(4-[[4-(trifluoromethoxy)phenyl]amino]furo[2,3-
d]pyridazin-7-yl)oxy]methyl}-2-pyridinecarboxamide
4-[({4-[(3-chloro-4-methoxyphenyl)amino]furo[2,3-d]pyridazin-7-
yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide
4-({[4-(acetyl(methyl)amino]phenyl}amino)furo[2,3-d]pyridazin-7-
yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide
N-methyl-4-{[(4-{[4-(4-morpholinyl)phenyl]amino}furo[2,3-
d]pyridazin 7-yl)oxy]methyl} 2-pyridinecarboxamide
4 [({4 [(3,4 difluorophenyl)amino]furo[2,3 d]pyridazin 7
yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide
N-(1,3-benzothiazol-6-yl)-N-(4-[(4-chlorophenyl)amino]furo[2,3-
d]pyridazin-7-yl]amine
4 ([[4 (2,3 dihydro 1H inden-5 ylamino)furo[2,3 d]pyridazin-7
yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide
4 [({4 [(2 methoxyphenyl)amino]furo[2,3 d]pyridazin 7
yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide
y , y ,, -1, - Fy

4-[([4-[(3-methoxyphenyl)amino]furo[2,3-d]pyridazin-7-

4-([[4-(1,3-benzodioxol-5-ylamino)furo[2,3-d]pyridazin-7-

4-[([4-[(3,4-dichlorophenyl)amino]furo[2,3-d]pyridazin-7-

4-[([4-[(3,5-dimethylphenyl)amino]furo[2,3-d]pyridazin-7-

yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide

yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide

yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide

yl\oxy)methyl]-N-methyl-2-pyridinecarboxamide

<del>55</del>	4-([[4-(1H-indazol-5-ylamino)furo[2,3-d]pyridazin-7-yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide
<del>56</del>	
<del>30</del>	N-(4-methoxyphenyl)-7-(4-pyridinylmethoxy)furo[2,3-d]pyridazin-4-amine
<del>57</del>	4-[([4-[(4-hydroxyphenyl)amino]furo[2,3-d]pyridazin-7-
	yl}oxy)methyl]-N-methyl-2-pyridinecarboxamide
58	4-{[7-(4-pyridinylmethoxy)furo[2,3-d]pyridazin-4-yl]amino}phenol
59	4-{[(4-anilinofuro[2,3-d]pyridazin-7-yl)oxy]methyl}-N-methyl-2-
	pyridinecarboxamide
60	4-[([4-[(3-methoxy-4-methylphenyl)amino]furo[2,3-d]pyridazin-7-
	yl}oxy)methyl]-N-methyl-2-pyridinecarboxamide
61	N-(4-chlorophenyl)-7-{[2-(4-morpholinylearbonyl)-4-
	pyridinyl]methoxy}furo[2,3-d]pyridazin-4-amine
62	N methyl 4 [({4 [(2 methyl 1,3 benzothiazol 5 yl)amino]furo[2,3-
	d]pyridazin-7-yl}oxy)methyl]-2-pyridinecarboxamide
<del>63</del>	4-({[4-(1,3-benzothiazol-6-ylamino)furo[2,3-d]pyridazin-7-
	yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide trifluoroacetate
64	<del>[4-[(4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-</del>
	yl}oxy)methyl]-2-pyridinyl}methanol
<del>65</del>	4-({[4-(2,3-dihydro-1-benzofuran-5-ylamino)furo[2,3-d]pyridazin-7-
	yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide
66	4-({[4-(2,3-dihydro-1-benzofuran-5-ylamino)thieno[2,3-d]pyridazin-7-
	yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide
67	4-[([4-[(4-fluorophenyl)amino]thieno[2,3-d]pyridazin-7-
	yl}oxy)methyl]-N-methyl-2-pyridinecarboxamide
68	N-methyl-4-[([4-[(3-methylphenyl)amino]thieno[2,3-d]pyridazin-7-
	yl}oxy)methyl]-2-pyridinecarboxamide
69	4-[([4-[(4-methoxyphenyl)amino]thieno[2,3-d]pyridazin-7-
	yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide
70	N-methyl-4-{[(4-{[4-(trifluoromethoxy)phenyl]amino}thieno[2,3-
, ,	d]pyridazin 7 yl)oxy]methyl} 2 pyridinecarboxamide
71	N methyl 4 {[(4 {[4 (trifluoromethyl)phenyl]amino}thieno[2,3-
, ,	d]pyridazin-7-yl)oxy]methyl]-2-pyridinecarboxamide
72	4-[([4-[(4-bromophenyl)amino]thieno[2,3-d]pyridazin-7-
, -	yl]oxy)methyl]-N-methyl-2-pyridinecarboxamide
73	4 ({[4 (2,3 dihydro 1H inden-5 ylamino)thieno[2,3 d]pyridazin-7
75	yl]oxy}methyl) N methyl 2 pyridinecarboxamide
74	4 ([[4 (1,3 benzodioxol 5 ylamino)thieno[2,3 d]pyridazin 7
7-7	yl]oxy]methyl)-N-methyl-2-pyridinecarboxamide
75	N (1,3 benzothiazol 6 yl) N [4 (1,3 benzothiazol 6
73	ylamino)thieno[2,3-d]pyridazin-7-yl]amine
76	N (1,3 benzothiazol 6 yl) N [4 [(4 bromophenyl)amino]thieno[2,3-
70	• • • • • • • • • • • • • • • • • • • •
70	d]pyridazin 7-yl]amine
78	N (1,3 benzothiazol 6 yl) N (4 [(2,4 dimethylphonyl) amino lthianol 2 3 dlayridazin 7 yl) amino
	dimethylphenyl)amino]thieno[2,3-d]pyridazin-7-yl]amine

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<del>109</del>	4-[({4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl}oxy)methyl]-
	N-methyl-2-pyridinecarboxamide ethanesulfonatesulfonate
<del>110</del>	4-[({4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl]oxy)methyl]-
	N-methyl-2-pyridinecarboxamide dihydrochloride
111	4-[({4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl}oxy)methyl]-
	N-methyl-2-pyridinecarboxamide hydrobromide
112	4-[({4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl}oxy)methyl]
	N-methyl-2-pyridinecarboxamide sulfate
113	4-[({4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl]oxy)methyl]-
	N-methyl-2-pyridinecarboxamide nitrate
114	4-[([4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl]oxy)methyl]
	N-methyl-2-pyridinecarboxamide 2-hydroxyethanesulfonate
115	4-[({4-[(4-chlorophenyl)amino]furo[2,3-d]pyridazin-7-yl}oxy)methyl]
	N-methyl-2-pyridinecarboxamide benzenesulfonate